

We Claim:

1. A magnetic toroid comprising:
a metal ring surrounded by a first cast made of a non-platable material
5 which resists the adhesion of conductive material, and a second cast made of a platable material that promotes the adhesion of conductive material; and
a conductive material deposited onto the second cast.
2. The magnetic toroid of claim 1, wherein:
10 the first cast includes grooves on its surface, and the second cast being formed in said grooves.
3. The magnetic toroid of claim 1, wherein:
the first cast and the second cast are made of a plastic material.
15
4. The magnetic toroid of claim 1, wherein:
the conductive material deposited onto the second cast is a three-layered copper, nickel, gold composite.
- 20 5. A method of manufacturing a magnetic toroid comprising the steps of:
providing a metal ring;
molding a first cast around the metal ring;
molding a second cast around the metal ring; and
25 depositing conductive material onto the second cast.
6. The method of manufacturing a magnetic toroid of claim 5,
wherein:

the first cast is made of a non-platable material that resists the adhesion of the conductive material and the second cast is made of a platable material that promotes the adhesion of the conductive material.

5 7. The method of manufacturing a magnetic toroid of claim 5,
wherein:

the first cast is molded having grooves therein, and the second cast is molded into the grooves.

10 8. The method of manufacturing a magnetic toroid of claim 5,
wherein:

the conductive material is deposited onto the second cast using an electrodepositing technique, where the toroid is bathed in a solution of the conductive material which then adheres to the second cast.

15 9. The method of manufacturing a magnetic toroid of claim 8,
wherein:

the conductive material comprises a three layered copper, nickel, gold composite.

20 10. The method of manufacturing a magnetic toroid of claim 5,
wherein:

multiple layers of conductive material are deposited onto the second cast.

25 11. The method of manufacturing a magnetic toroid of claim 5,
wherein:

prior to depositing on the conductive material onto the second cast, the toroid is cleansed to remove any contaminants thereon.

30